Recovery Plan Action Status

Plan Name: Seven Coastal Plants and the Myrtle's Silverspot Butterfly Recovery Plan

Plan Status: Final Plan Date: 29-Sep-98 Lead Agency: USFWS

Lead Office: Ventura Fish And Wildlife Office 644-1766)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Myrtle's silverspot butterfly (Speyeria zerene myrtleae)	1	1.7	Protect Myrtle's silverspot butterfly habitat	Ongoing Current			To be determined	Acquisition: Easement	Internal Field Assistance	Habitat at Point Reyes National Seashore is all protected. This habitat supports the largest known population of the Myrtle's silverspot. The habitat is also managed by grazing to prevent seral succession and to limit the effects of invasive plants.
Menzies' wallflower (Erysimum menziesii), Howell's spineflower (Chorizanthe howellii), Monterey spineflower (Chorizanthe pungens var. pungens), Myrtle's silverspot butterfly (Speyeria zerene myrtleae), Monterey gilia (Gilia tenuiflora ssp. arenaria), Clover lupine (Lupinus tidestromii), Beach layia (Layia carnosa)	1	2.11	Minimize invasive plant threats on private land	Partially Complete			U.S. Bureau of Land Management	Work type not yet selected	Labor type not yet selected	Habitat restoration (exotics removal) has been ongoing by NGO's for many years at Humboldt Bay and Monterey Bay for Erysimum menziesii and/or Layia carnosa.

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Menzies' wallflower (Erysimum menziesii), Howell's spineflower (Chorizanthe howellii), Monterey spineflower (Chorizanthe pungens var. pungens), Myrtle's silverspot butterfly (Speyeria zerene myrtleae), Monterey gilia (Gilia tenuiflora ssp. arenaria), Clover lupine (Lupinus tidestromii), Sonoma spineflower (Chorizanthe valida), Beach layia (Layia carnosa)		2.12	Minimize invasive plant threats on public lands	Ongoing Current	FY 1995 - FY 1999		Ventura Fish and Wildlife Office	Management: Habitat Maintenance and Manipulation	Internal Field Assistance	Habitat restoration (exotics removal) has been ongoing for many years funded by Federal, State and/or local entities for one or more of the covered species by BLM, Vandenberg AFB, USFWS, State and National Parks public lands in Humboldt, Mendocino, Sonoma, Monterey and Santa Barbara Counties. PORE, in Feb 2011 conducted a large-scale dune restoration project just south of Abbott's Lagoon. Through the Abbotts Lagoon Coastal Dune Restoration Project, 80 acres of European beachgrass and 1 acre of iceplant were removed from approximately 200 acres of coastal dune. This project should have indirect benefits for Lupinus tidestromii by removing habitat for (artificially elevated numbers of) seed predators that threaten the existing Abbotts Lagoon population and allowing for natural sand movement, as well as some direct benefits for this species and Layia carnosa by creating new habitat for these species. Also, for the benefit of Chorizanthe valida, in Dec 2010, more than 10 acres of yellow bush

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
										lupine was removed (which is known to facilitate invasion by non- native species by increasing nitrogen and organic content).
Myrtle's silverspot butterfly (Speyeria zerene myrtleae)	1	2.2	Deter poaching - silverspot	Ongoing Current	FY 1995 - FY 1999		Local Lead Agencies [California coast, Myrtle's Silverspot/Seven coastal plants habitat]	Management: Depredation Control	Internal Field Assistance	
Myrtle's silverspot butterfly (Speyeria zerene myrtleae)	1	3.22	Mytle's silverspot butterfly life history	Not Started				Research: Habitat Requirements	Internal Field Assistance	
Myrtle's silverspot butterfly (Speyeria zerene myrtleae)	1	3.3	Investigate grazing effects on Myrtle's silverspot butterfly	Complete	FY 1995 - FY 1999	FY 2000 - FY 2004	To be determined	Research: Habitat Requirements	Graduate Student	Subject of 2004 MS thesis by Dawn Adams
Myrtle's silverspot butterfly (Speyeria zerene myrtleae)	2	3.5	Determine habitat requirements for butterfly	Not Started			U.S. Fish and Wildlife Service, To be determined	Research: Habitat Requirements	Internal Field Assistance	
Myrtle's silverspot butterfly (Speyeria zerene myrtleae)	2	4.81	Establish working group -Silverspot	Not Started			U.S. Fish and Wildlife Service	Research	Internal Field Assistance	
Myrtle's silverspot butterfly (Speyeria zerene myrtleae)	2	4.82	Implement guidelines - Silverspot	Ongoing Current	FY 1995 - FY 1999		To be determined	Research	Internal Field Assistance	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Menzies' wallflower (Erysimum menziesii), Howell's spineflower (Chorizanthe howellii), Monterey spineflower (Chorizanthe pungens var. pungens), Myrtle's silverspot butterfly (Speyeria zerene myrtleae), Monterey gilia (Gilia tenuiflora ssp. arenaria), Clover lupine (Lupinus tidestromii), Sonoma spineflower (Chorizanthe valida), Beach layia (Layia carnosa)	3	5.1	Monitor populations - trends	Ongoing Current	FY 2006		U.S. Fish and Wildlife Service, To be determined	Research: Population Surveys	Contract, Internal Field Assistance	Erysimum menziesii monitored generally on routine basis at many sites across the range by BLM, USFWS, and California State Parks. Layia carnosa is monitored by National Parks, Pt Reyes NS, BLM, USFWS, California State Parks, Vandenberg AFB and several NGO's across the range. Research including a comparison of critical life history functions across the range will be implemented winter 2011 to determine if recovery goals for populations at the limits of its range are feasible to achieve. A population estimate was made for the first time in 2011 of Chorizanthe howellii at McKerricher State Park, Mendocino County. Monitoring of C. vallida and Lupinus is ongoing at Point Reyes National Park.

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Menzies' wallflower (Erysimum menziesii), Howell's spineflower (Chorizanthe howellii), Monterey spineflower (Chorizanthe pungens var. pungens) Myrtle's silverspot butterfly (Speyeria zerene myrtleae), Monterey gilia (Gilia tenuiflora ssp. arenaria), Clover lupine (Lupinus tidestromii), Sonoma spineflower (Chorizanthe valida), Beach layia (Layia carnosa)	3	5.2	Monitor success at reducing threats	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, To be determined	Research: Habitat Status, Research: Population Surveys	Internal Field Assistance	Rarious routine monitoring efforts conducted by BLM, USFWS, State and national Parks, Vandenberg AFB and others across the mage of the species.
Menzies' wallflower (Erysimum menziesii), Howell's spineflower (Chorizanthe howellii), Monterey spineflower (Chorizanthe pungens var. pungens), Myrtle's silverspot butterfly (Speyeria zerene myrtleae), Monterey gilia (Gilia tenuiflora ssp. arenaria), Clover lupine (Lupinus tidestromii), Sonoma spineflower (Chorizanthe valida), Beach layia (Layia carnosa)	3	5.3	Survey likely habitat	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, To be determined	Work type not yet selected	Labor type not yet selected	Routine surveys conducted as required as part of project planning efforts at state and federal levels across the ranges of the species.

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Menzies' wallflower (Erysimum menziesii), Howell's spineflower (Chorizanthe howellii), Monterey spineflower (Chorizanthe pungens var. pungens), Myrtle's silverspot butterfly (Speyeria zerene myrtleae), Monterey gilia (Gilia tenuiflora ssp. arenaria), Clover lupine (Lupinus tidestromii), Sonoma spineflower (Chorizanthe valida), Beach layia (Layia carnosa)		7	Outreach program	Ongoing Current			U.S. Fish and Wildlife Service, To be determined	Work type not yet selected	Labor type not yet selected	No formal outreach implemented; informal education and outreach conducted as routine operation of federal and state agency landowners, and NGO landowners.